The Red Eye

David E. Anisman, MD

A Few Rules to Live By….

- **Never put steroid drops in an eye unless directed to do so by an ophthalmologist**
  - **follow-up with an ophthalmologist is a must**

A Few Rules to Live By….

- **Anesthetic drops are *diagnostic* only**
  - **retard corneal healing**
  - **cycloplegics preferred for analgesia**

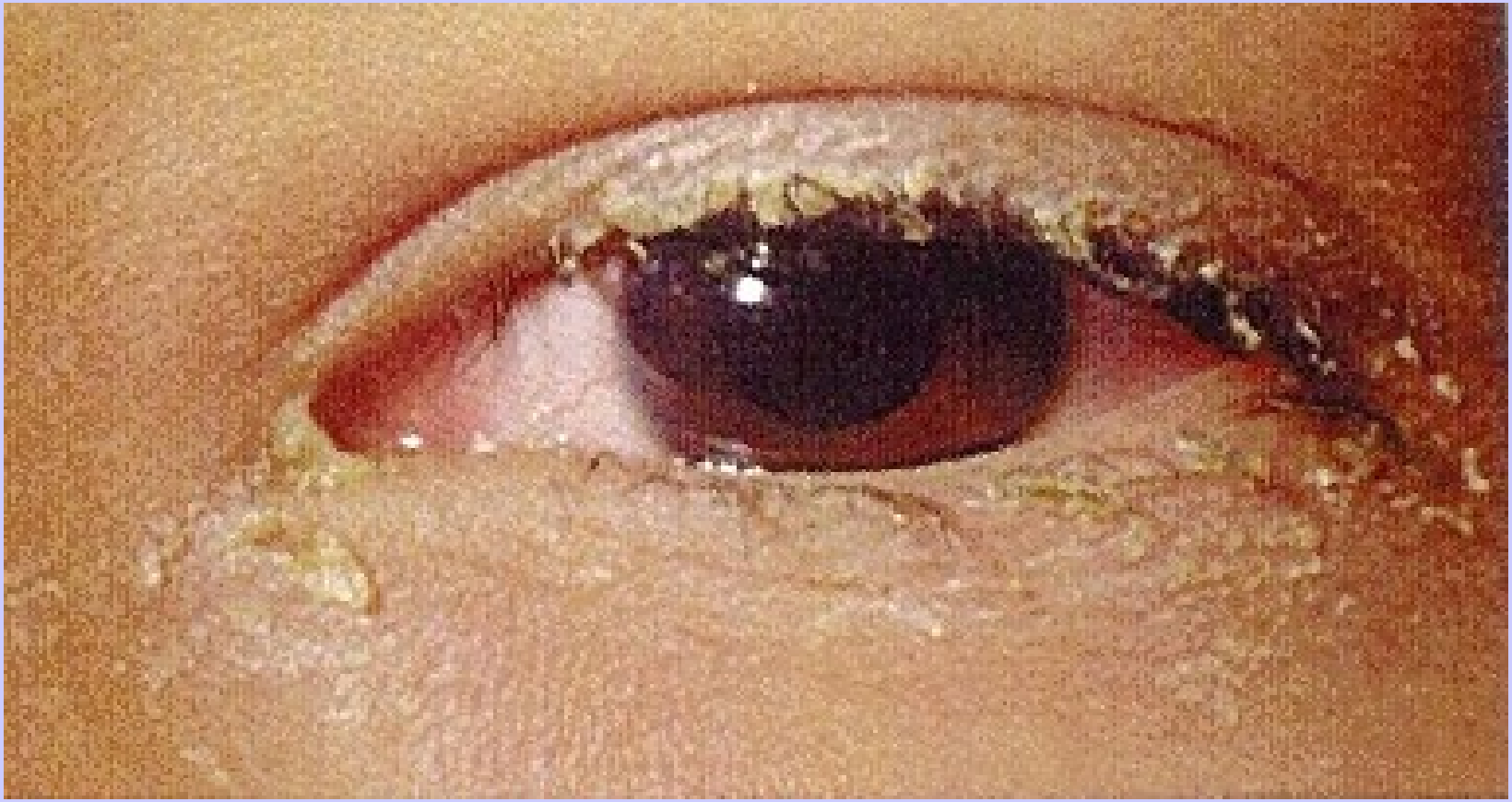
A Few Rules to Live By….

- **Va is the vital sign of the eye**
  - **each eye separately, both eyes together**
  - **if not near normal, try pinhole**
  - **if still not normal, suspect unclear media**

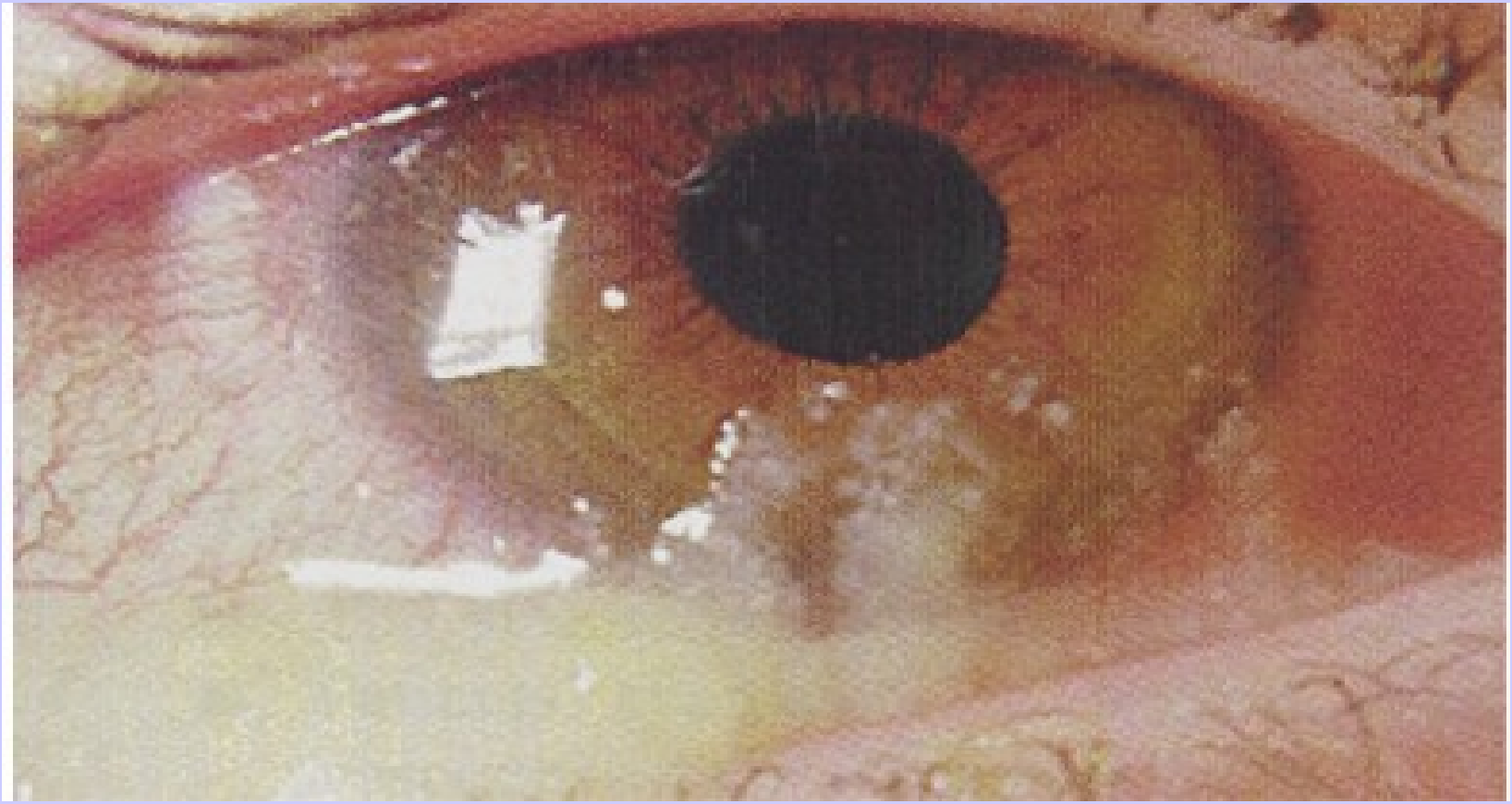
A Few Rules to Live By….

- **Any red eye that does not resolve as expected….**
  - **immediate re-evaluation**
  - **consider referral**

Case #1



Case #1



Case #1

- **Dx: Bacterial Conjunctivitis**
- **Etiology: staph, Hemophilus, S. pneumo**
  - **GC, N. meningiditis**
- **If Nisseria or chlamydia suspected: Cx**
- **Tx: topical Ciloxan, Polytrim, sulfacetamide, Erythromycin**
  - **urgent referral for Nisseria**

Case #1

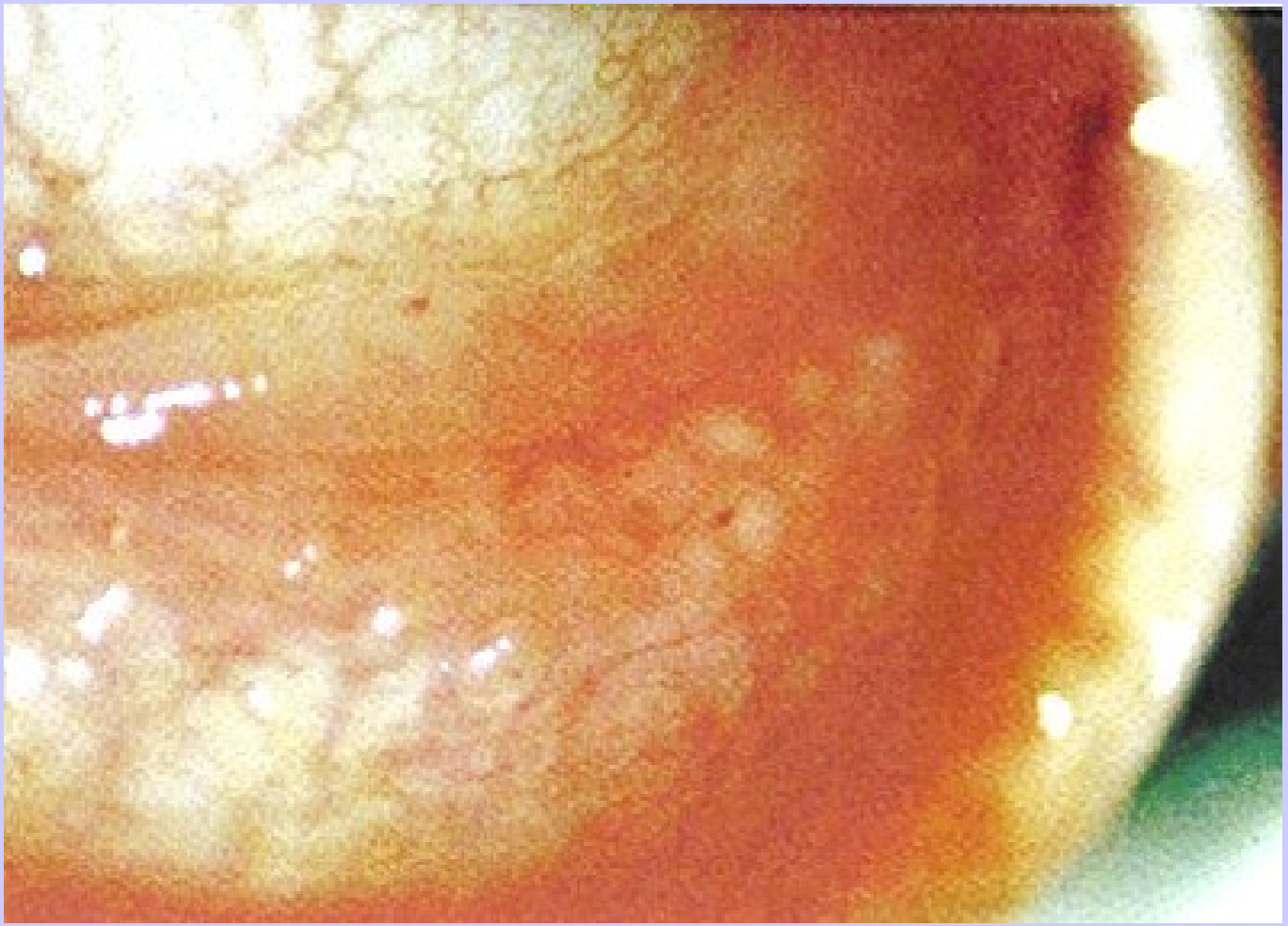
- **DDx:**
  - **Allergic Conjunctivitis**

Case #1

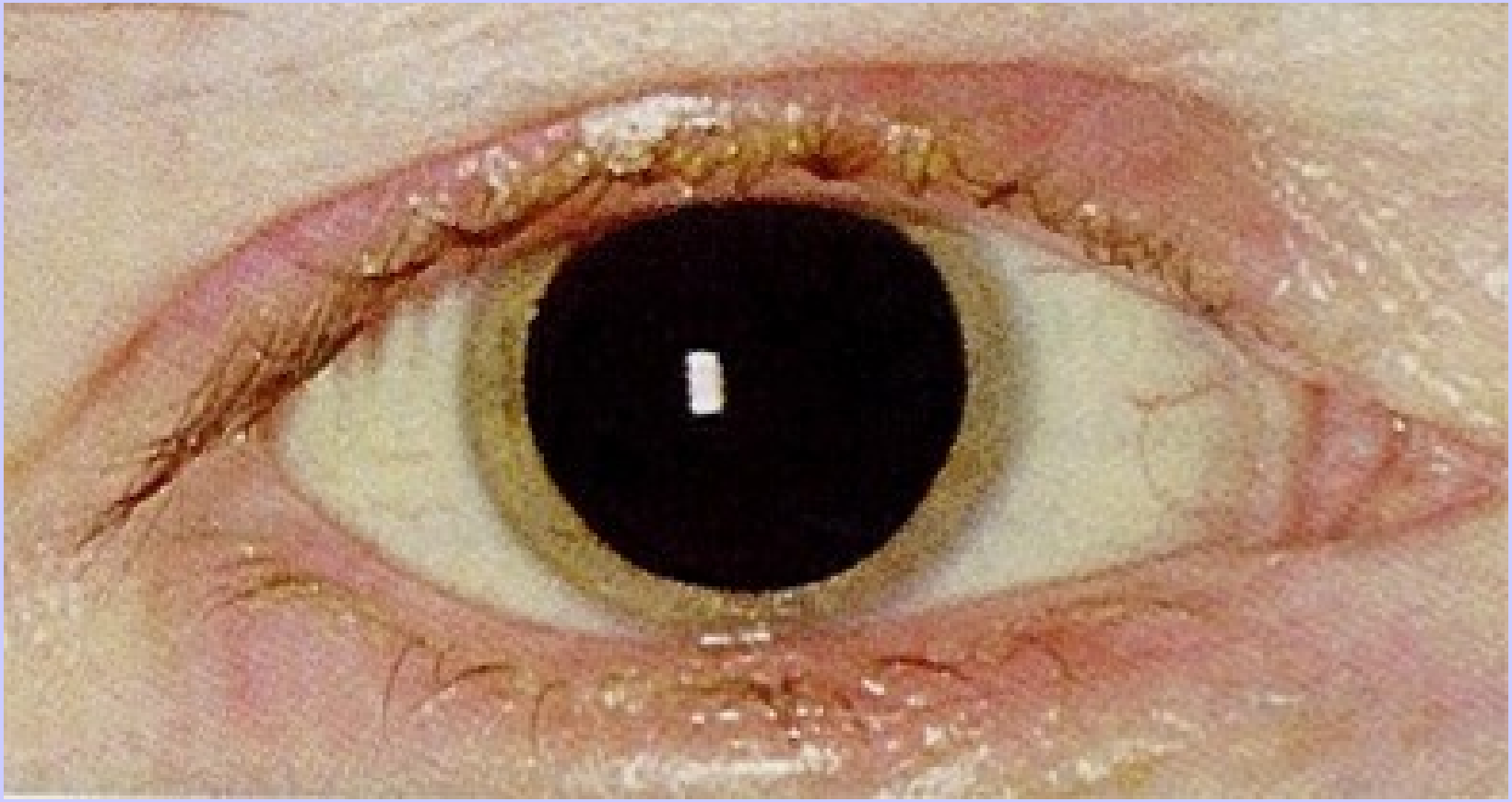
- **DDx:**
  - **Allergic Conjunctivitis**
  - **Neonatal Conjunctivitis**

Case #1

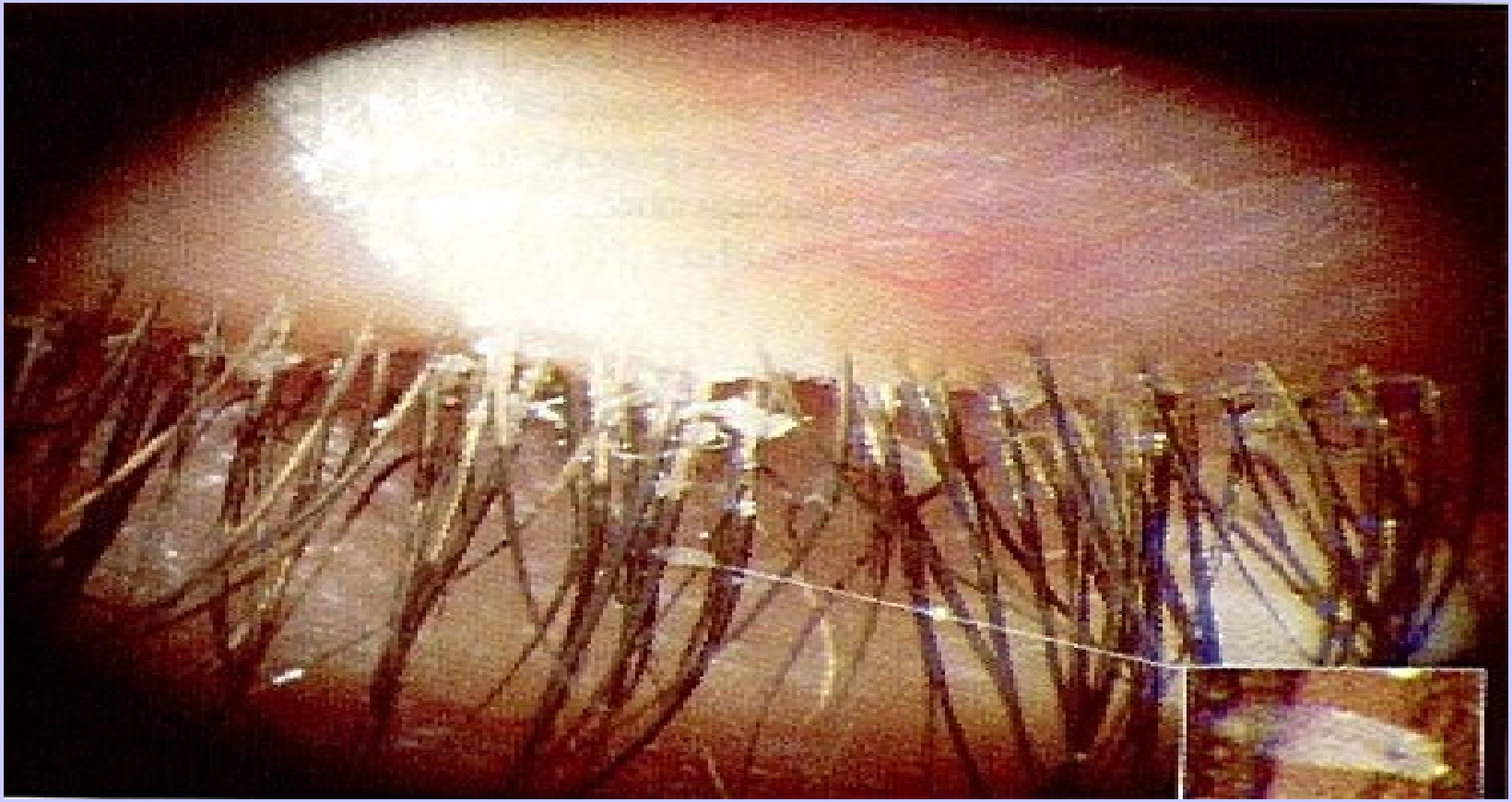
- **DDx:**
  - **Allergic Conjunctivitis**
  - **Neonatal Conjunctivitis**
  - **Viral Conjunctivitis**



Case #2

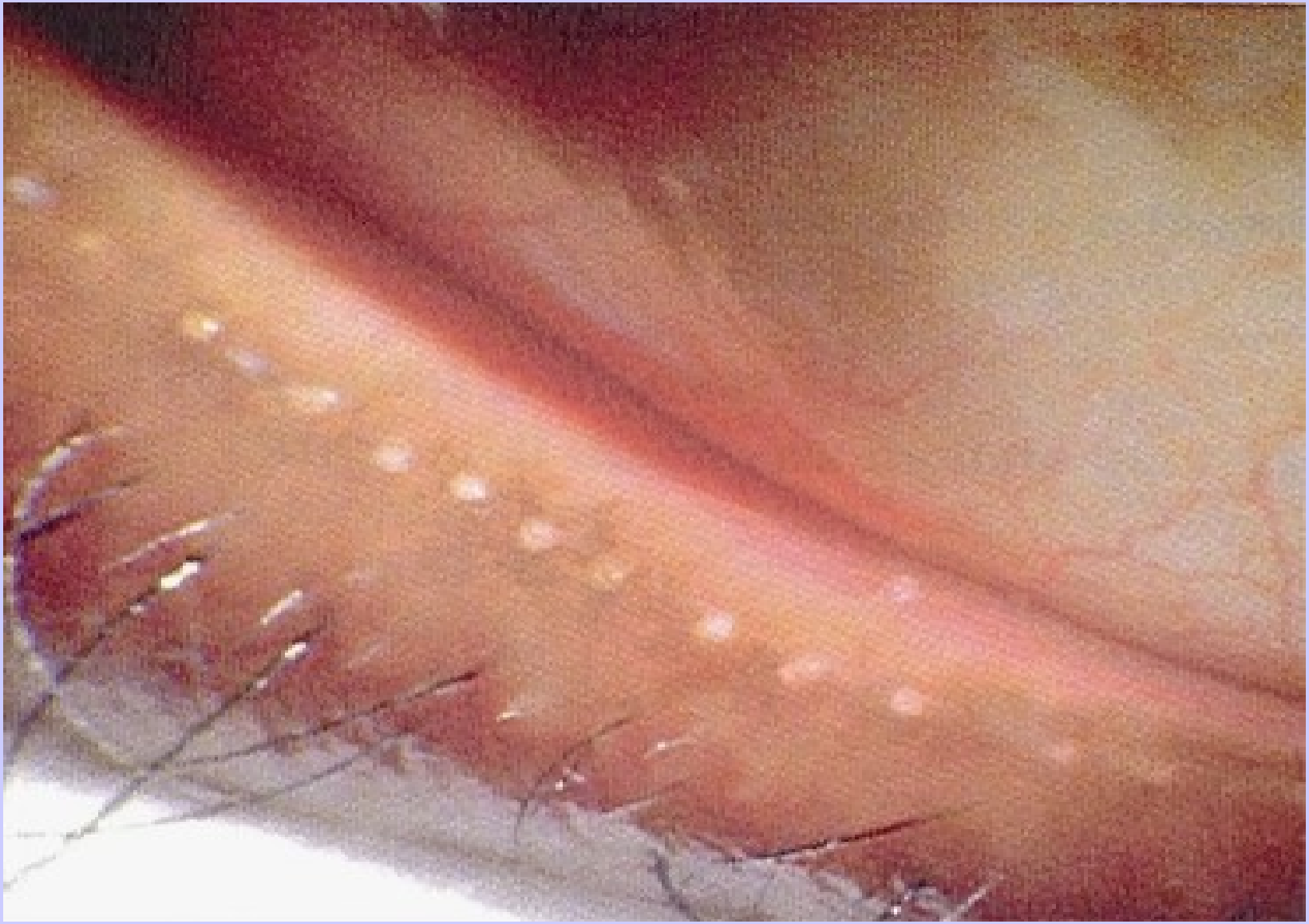


Case #2

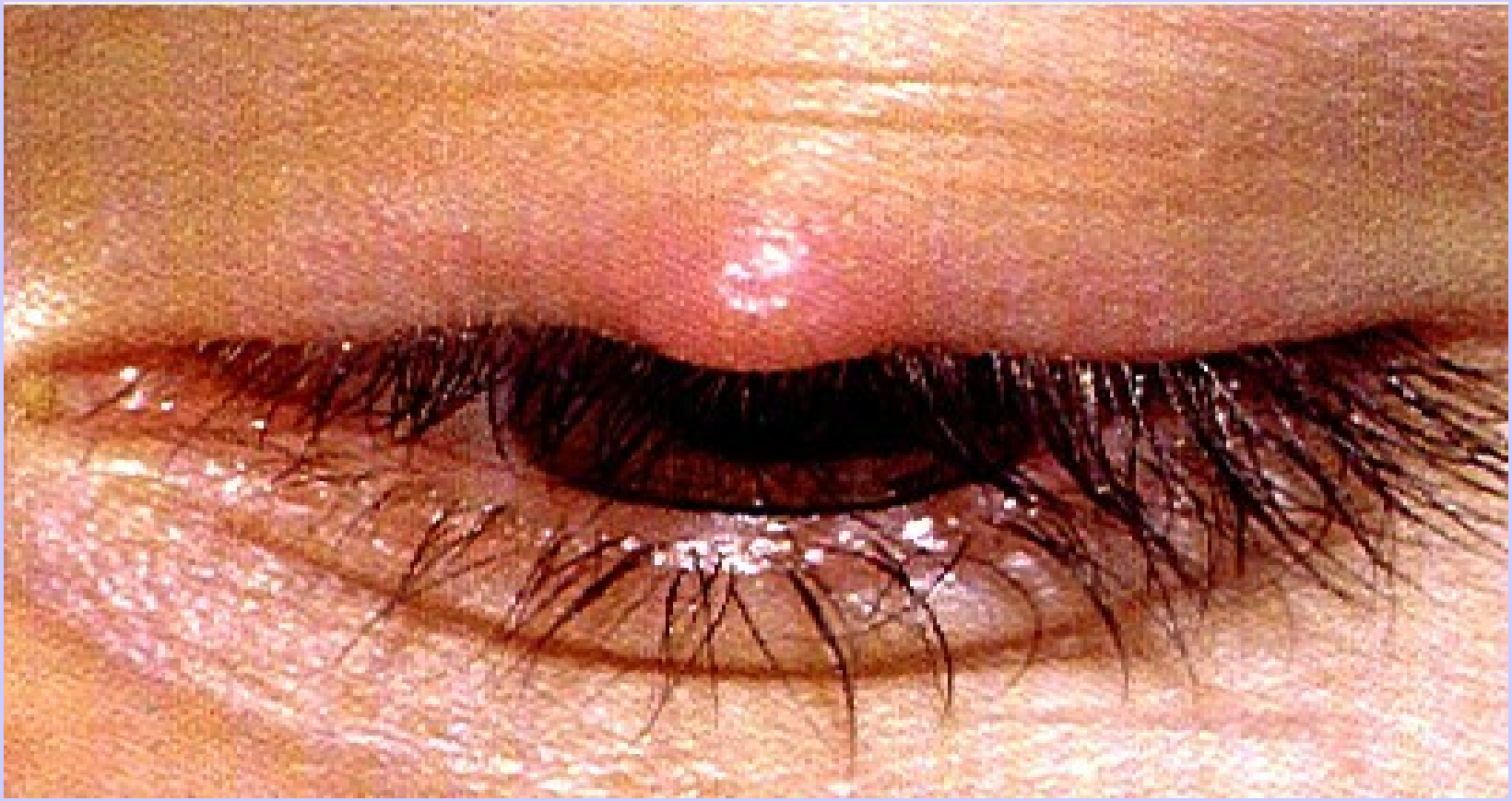


Case #2

- **Dx: Blepharitis**
- **Etiology: seborrhea; staph (often assoc w/ hordeola); meibomian gland dysfunction (often assoc w/ chalazia)**
- **Tx: daily lid margin scrubs; massage of lid margins; abx (erythro or Polysporin B ung; Doxy 50-200mg qd x 6 weeks)**

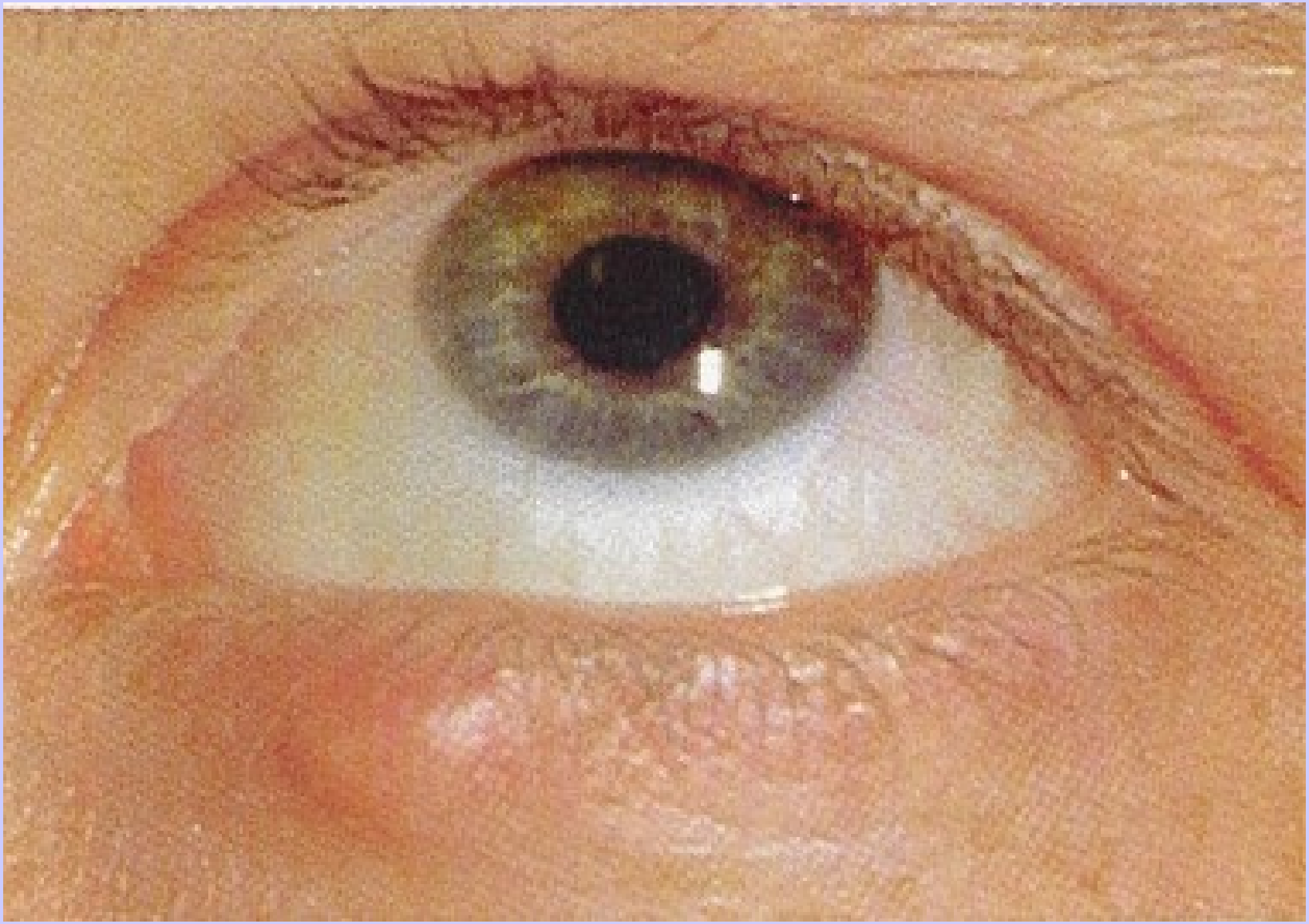


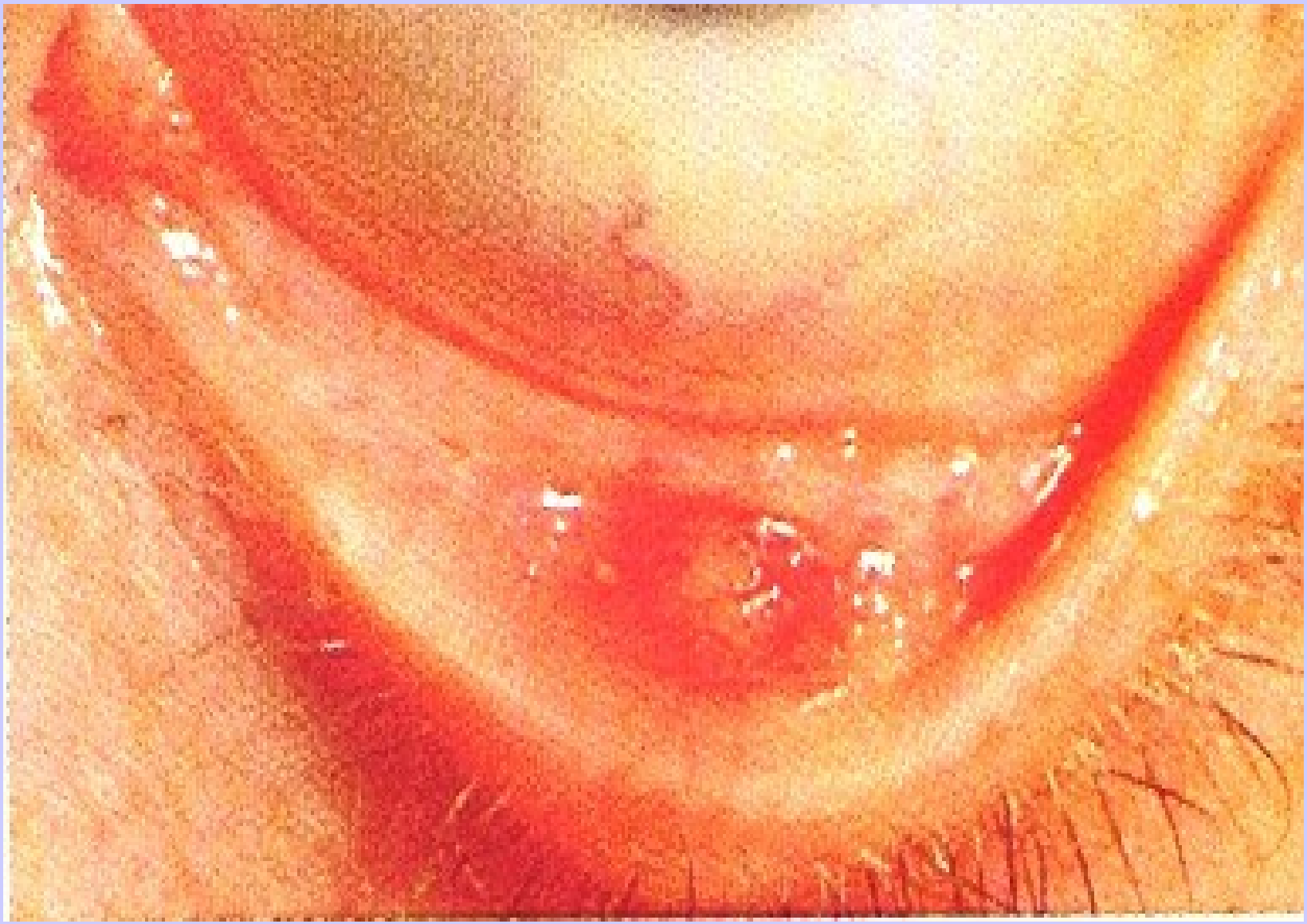
Case #3



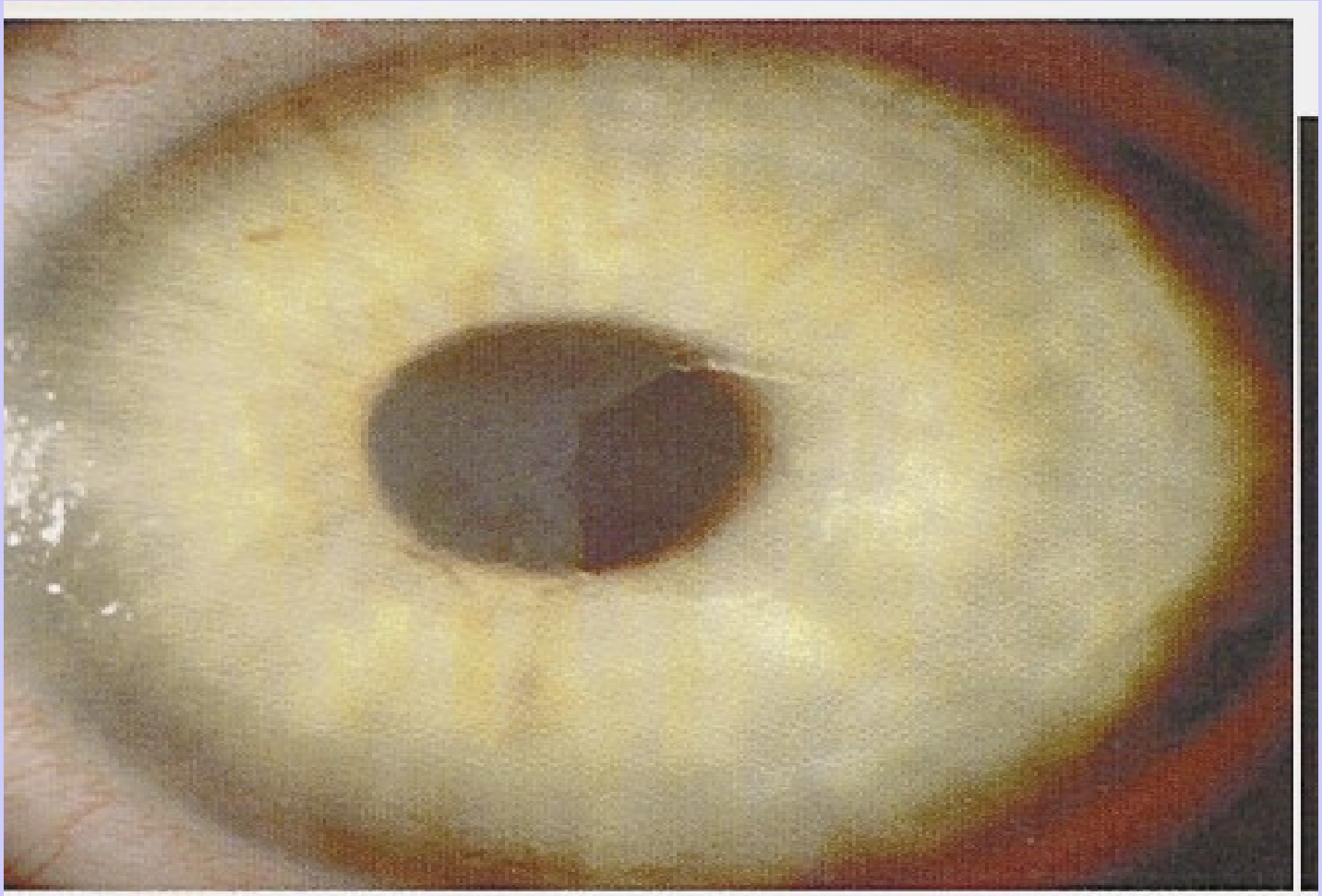
Case #3

- **Dx: External hordeolum**
- **Etiology: staph infxn of a sebaceous gland of the lid**
- **Tx: warm compress (hard boiled egg) +/- topical abx (e-mycin or bacitracin ung) tid--qid**
  - **I&D if conservative tx fails (refer)**

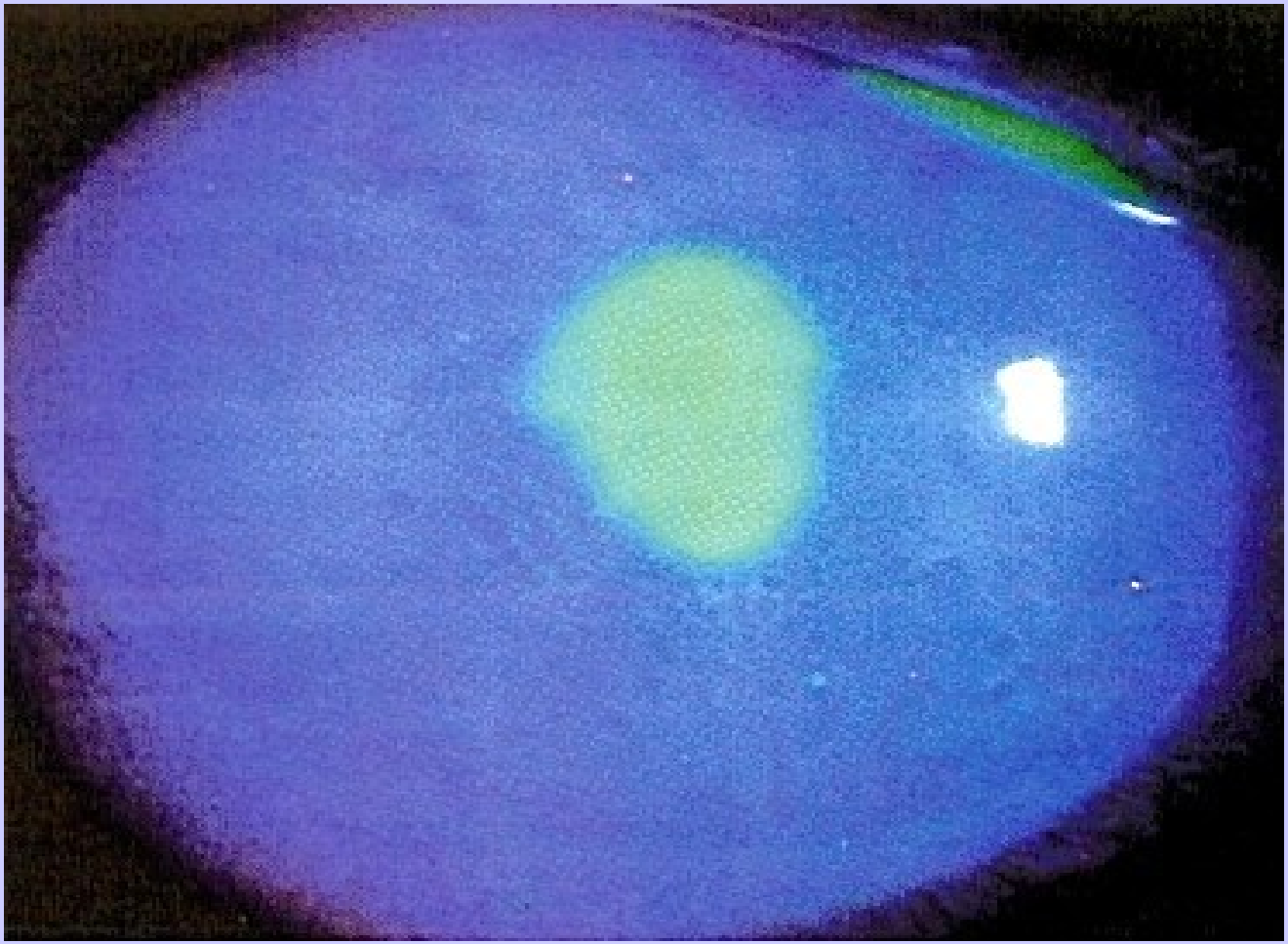




Case #4



Case #4



Case #4

- **DDx: viral keratitis (beware the dendritic appearance of herpes simplex), foreign body, UV injury**
- **W/U: rule out foreign body**

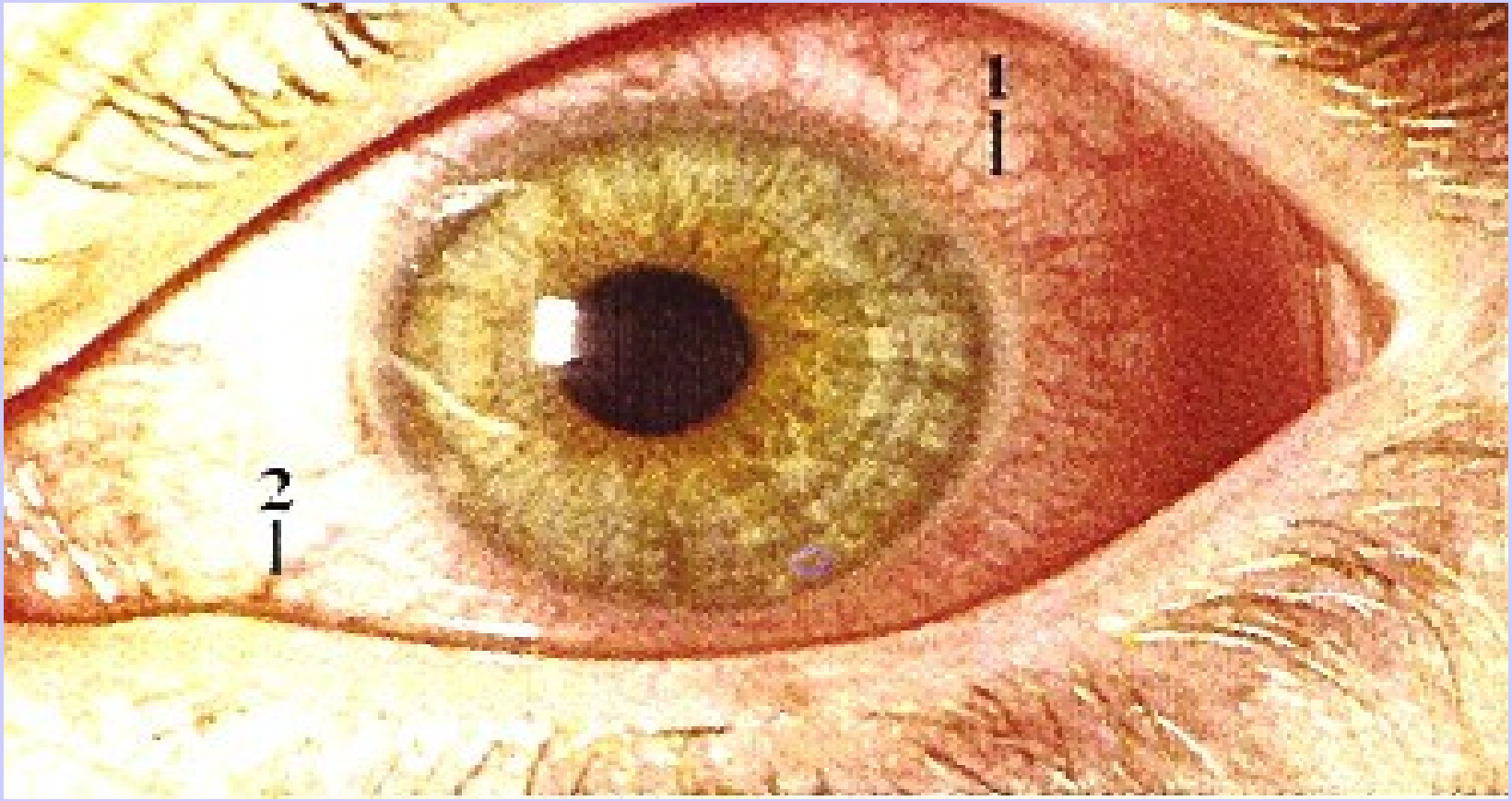
Case #4

- **Tx:**
  - **cycloplegia (homatropine 5%) tid**
  - **abx ung (Polysporin or erythro tid; if caused by vegetable matter, use Tobramycin ophth ung)**
  - **pressure patch x 24hr (max) for large abrasions (>5-10mm)**

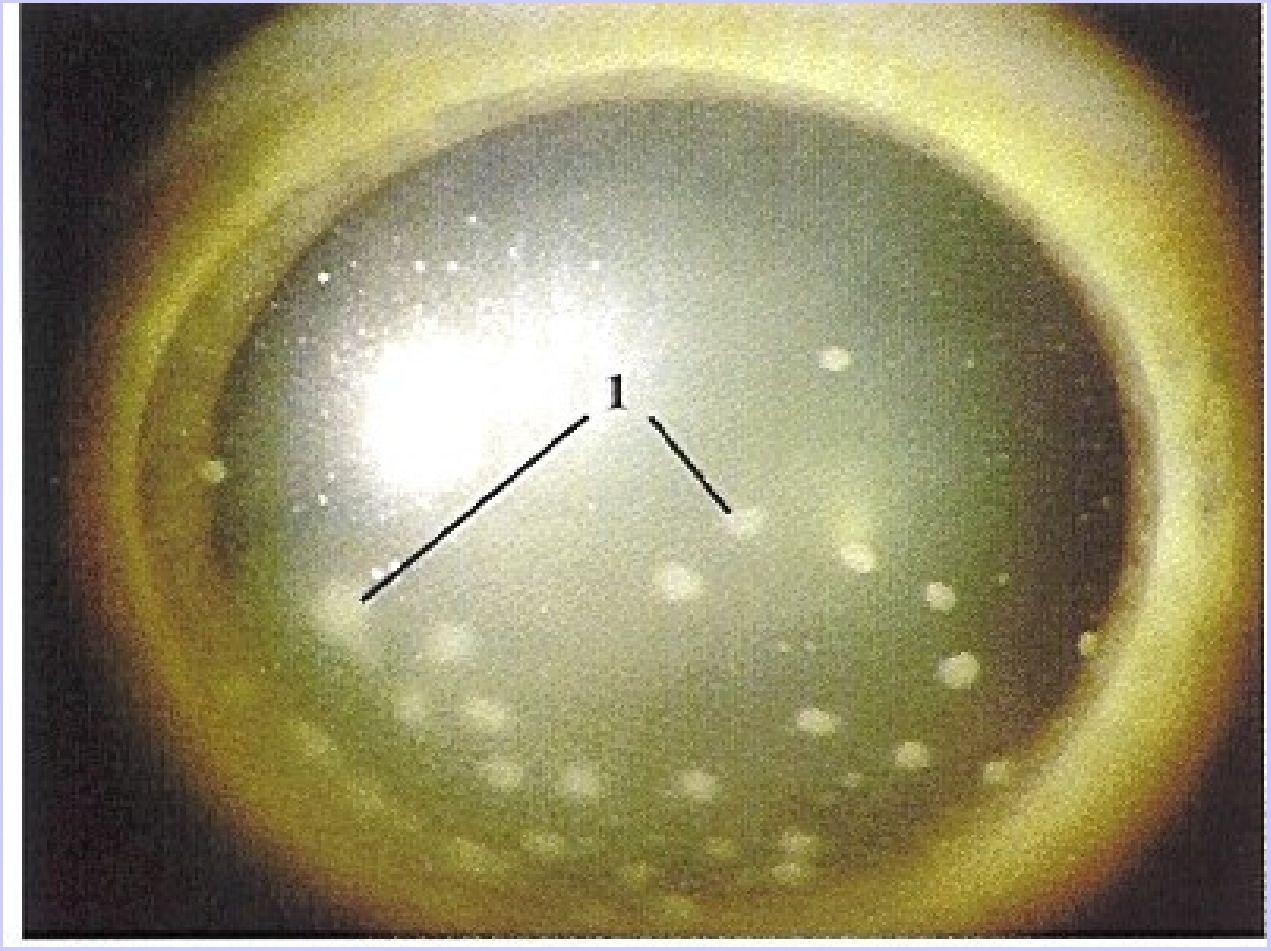
Case #4

- **Tx:**
  - **analgesia w/ oral meds (to include narcotics prn)**
  - **refer large central abrasions to Ophtho**
  - **DO NOT give topical analgesics to patient to take home**
  - **F/u: daily until completely healed; *if this takes >3d, refer.***

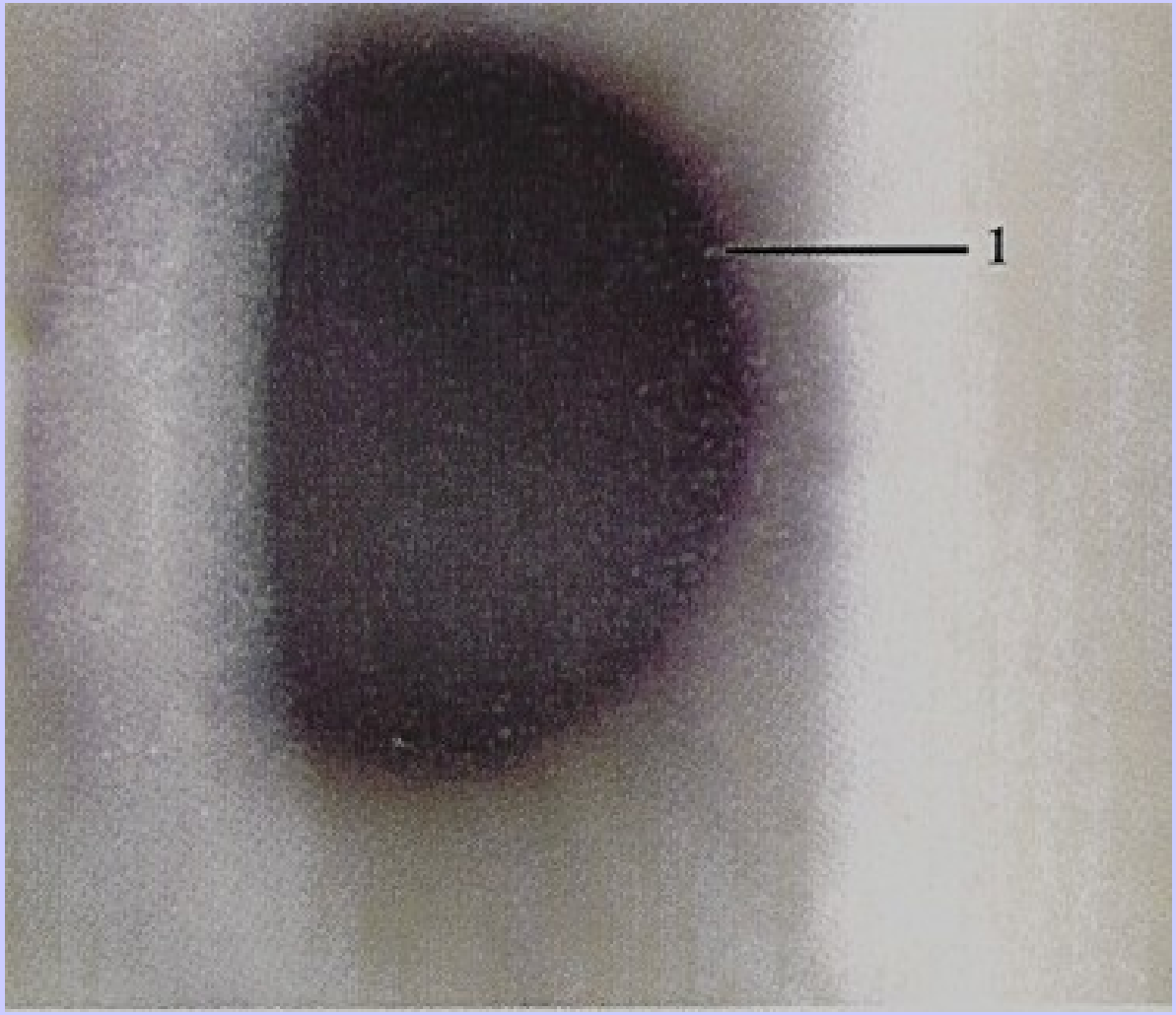
Case #5



Case #5



Case #5



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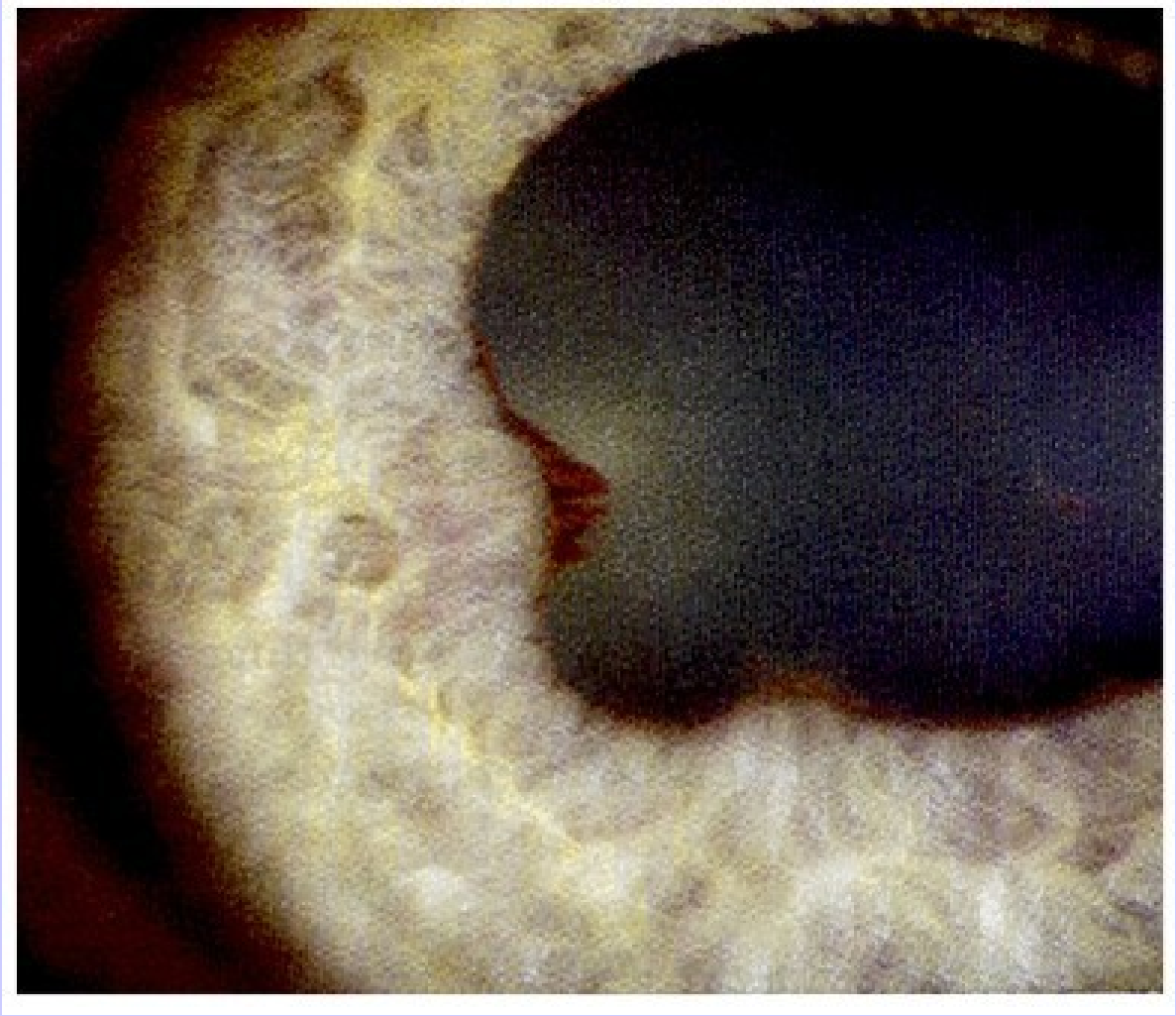


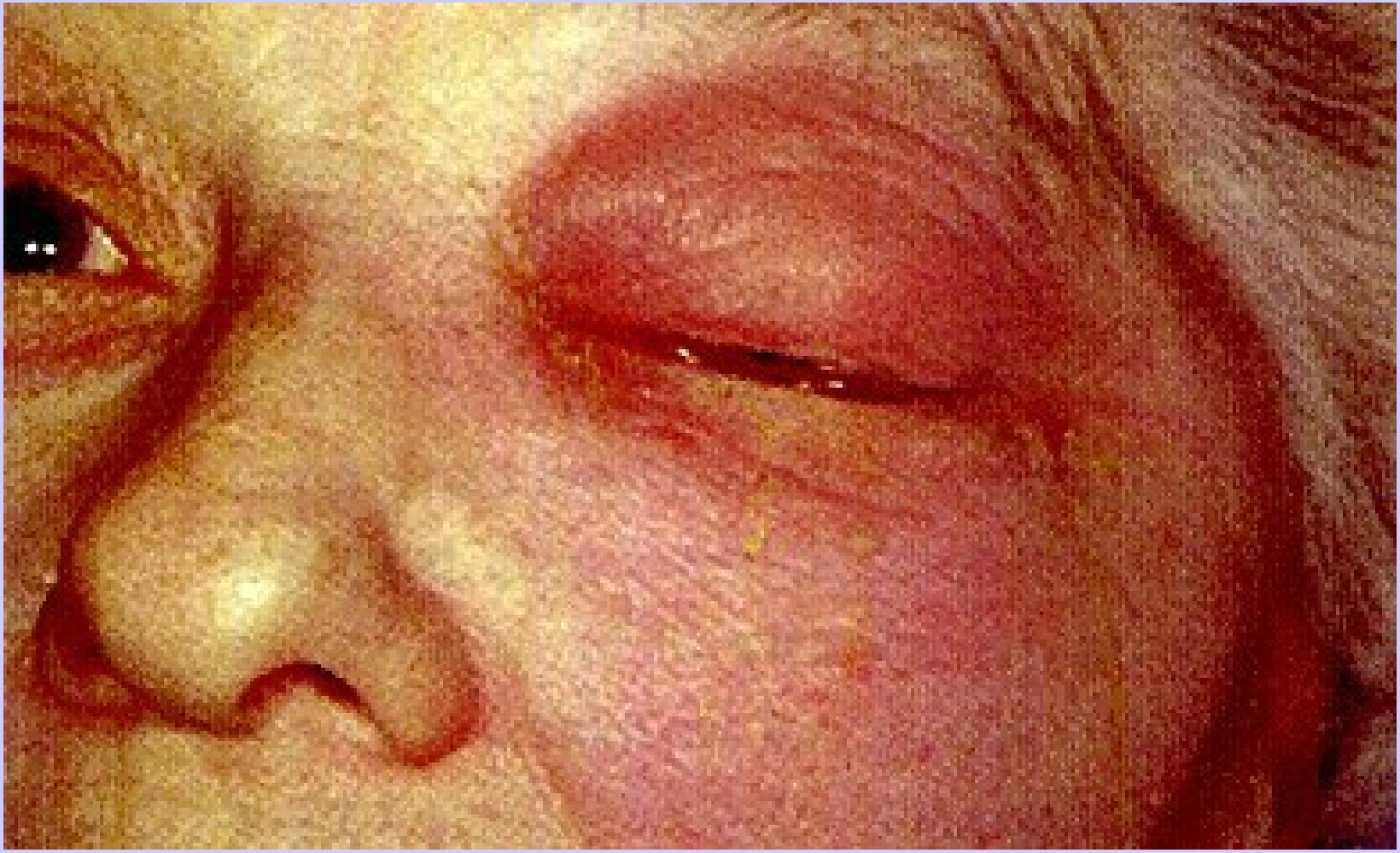
Case #5

- **Etiol: most idiopathic; many systemic causes**
- **W/U: careful H&P, looking for systemic disease**
  - **for unilateral, first-episode disease, unremarkable hx and exam, no w/u needed**
  - **for bilateral, recurrent disease, systemic w/u indicated**

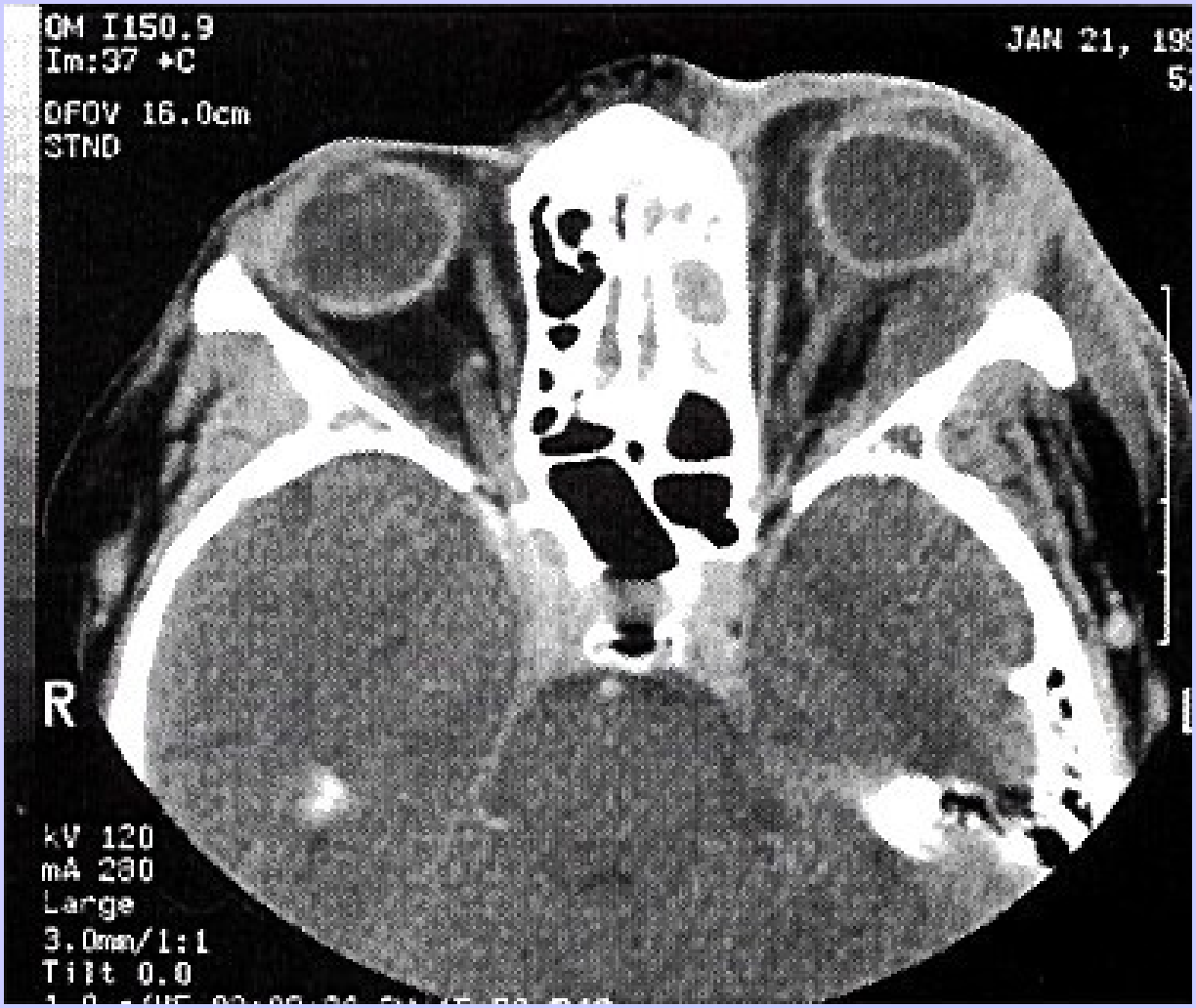
Case #5

- **Tx:**
  - ***ophtho referral w/in 24h***
  - **cycloplegia (topical homatropine 5% bid)**
  - **topical steroid (Pred-Forte 1%) *initiated by an ophthalmologist***

Case #6



Case #6


GM I150.9
Im:37 *C
DFOV 16.0cm
STND
JAN 21, 19
R
kV 120
mA 280
Large
3.0mm/1:1
Tilt 0.0

Case #6

- **Dx: Orbital Cellulitis**
- **Tx:**
  - ***IMMEDIATE Ophtho referral***
  - **IV broad-spectrum abx**
  - **surgical drainage for large abscess**
- **F/u: ensure cavernous sinus thrombosis doesn't develop**

Case #6

- **DDx: Preseptal Cellulitis**
- **Sx:**
  - **pain with EOM due to lid discomfort**
  - **no diplopia**
  - **lack of systemic toxicity**
- **Etiol: URI, sinusitis, lid trauma, hordeolum**

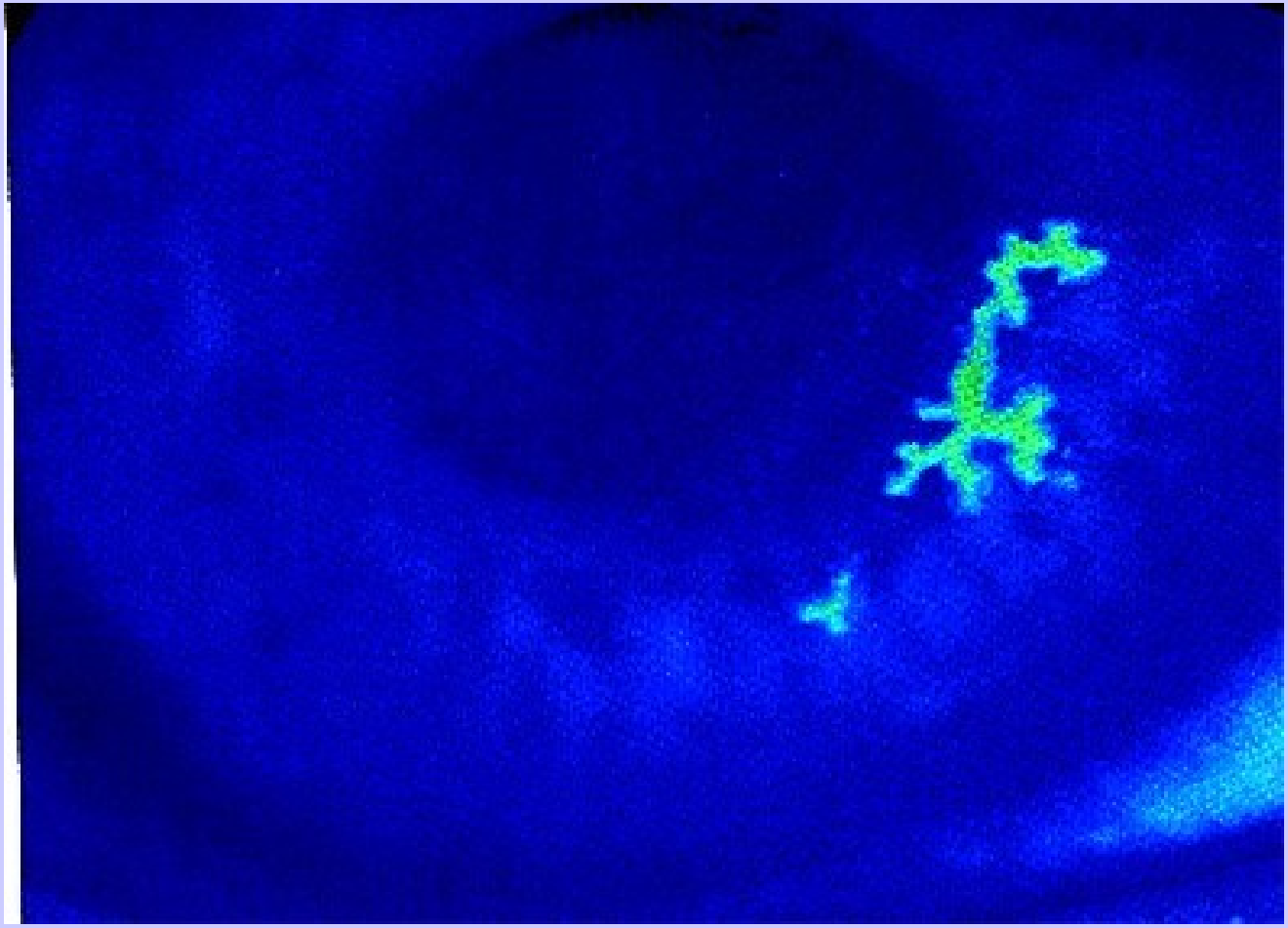
Case #6

- **Tx (Preseptal Cellulitis)**
  - **mild cellulitis - oral broad-spectrum abx**
  - **severe - IV broad-spectrum abx**
  - **child < 2 yrs: admit for IV abx**
- **F/u: ensure orbital cellulitis doesn't develop**

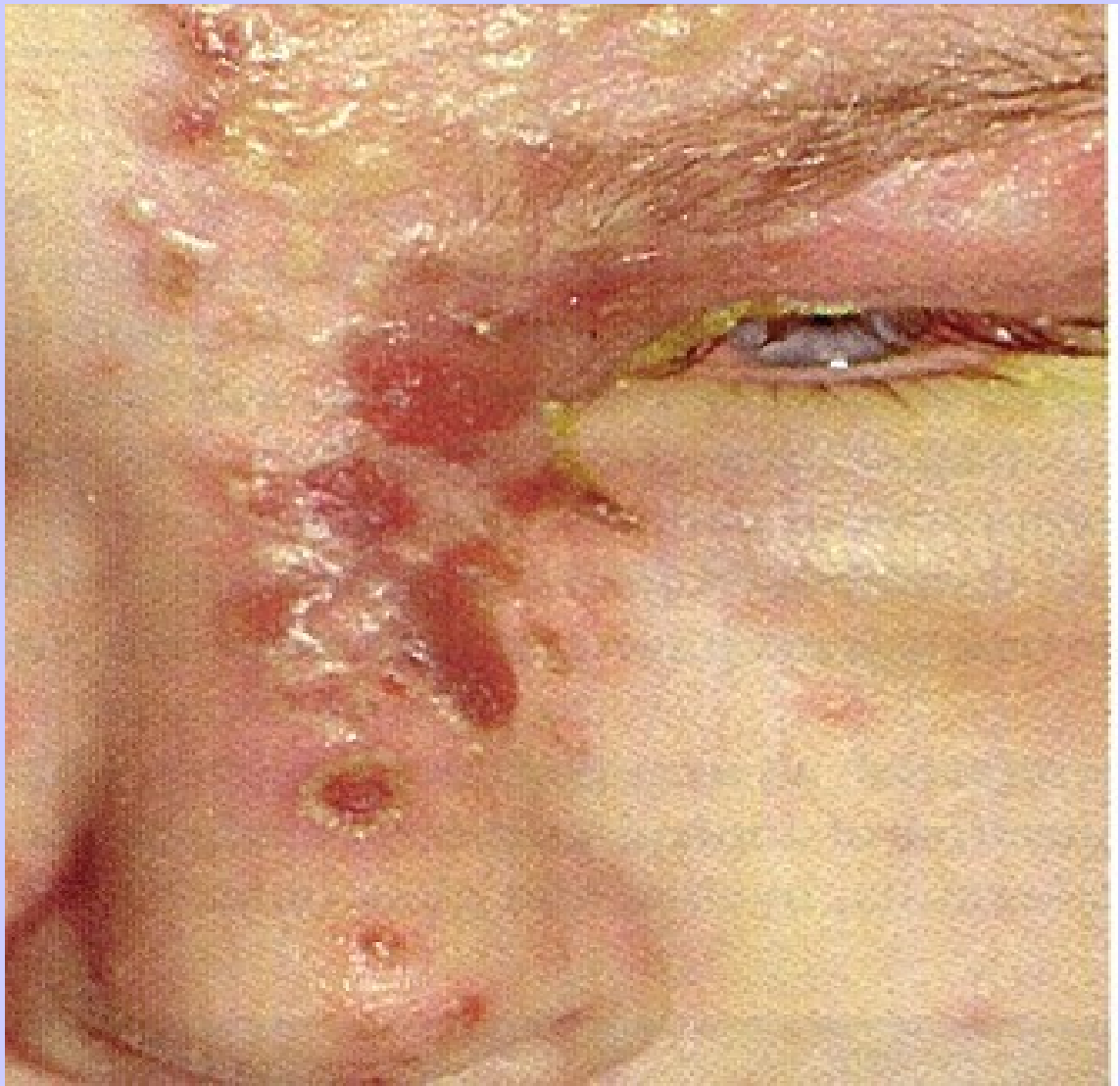
Case #7

- 26 y.o. M c/o 1 day of irritation, photophobia, pain mild OD
- Exam: Va 20/20 OU; mild conj. Injection; nl EOM and pupillary light reaction

Case #7



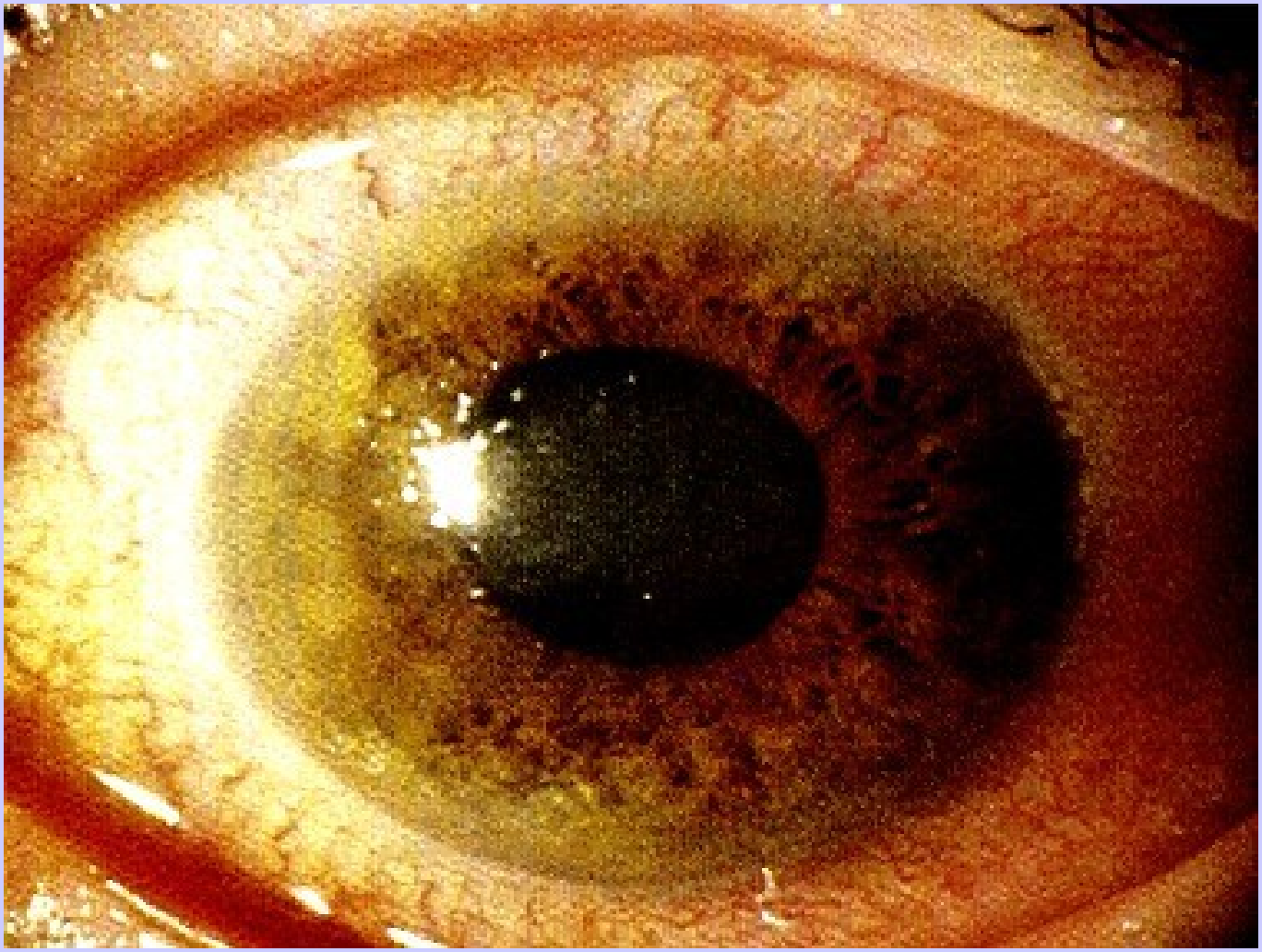
Case #8

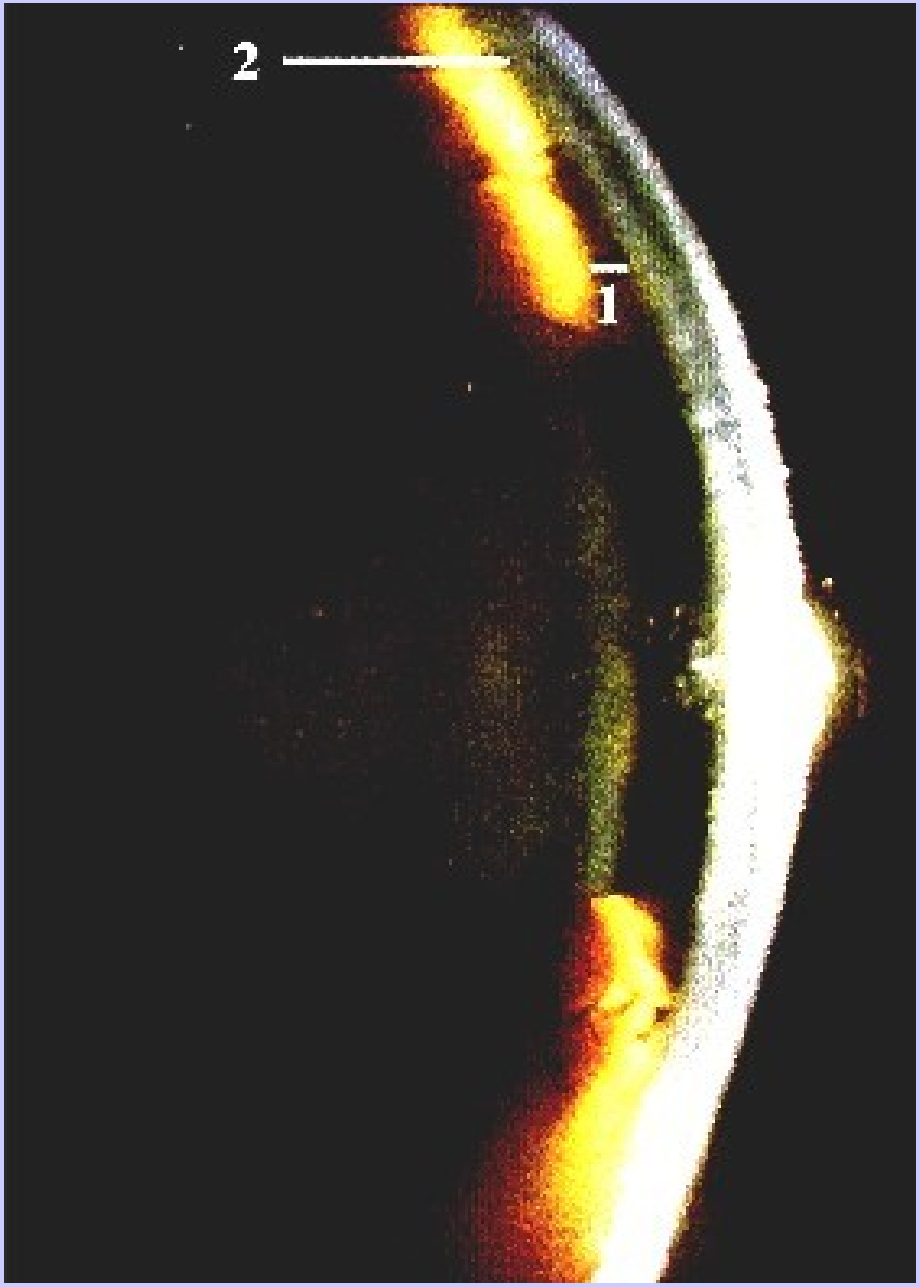


Case #9

- **66 y.o. F c/o intense pain and photophobia OD while sitting in theater**
  - **blurred vision**
  - **seeing halos around lights**
  - **lightheaded**

Case #9

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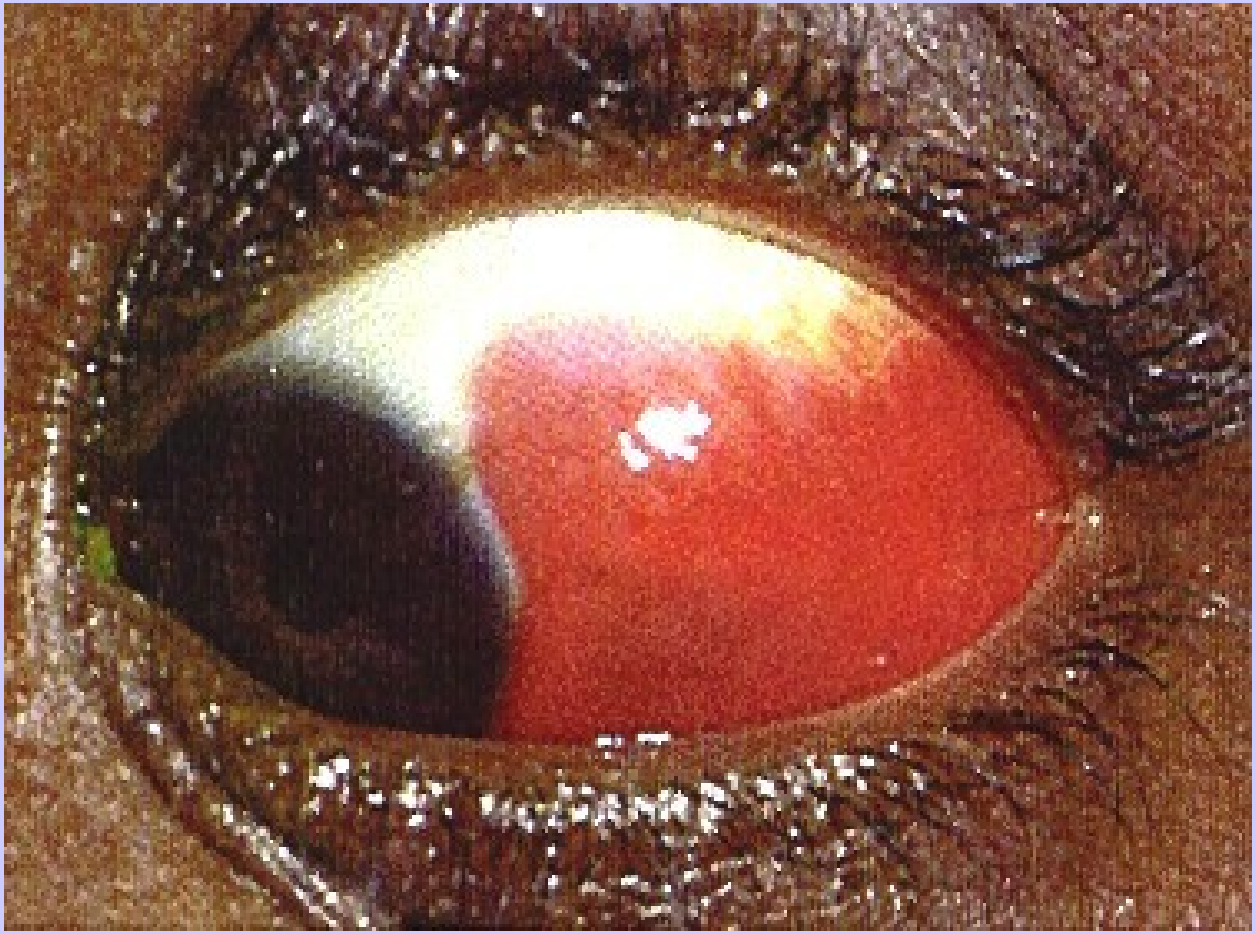
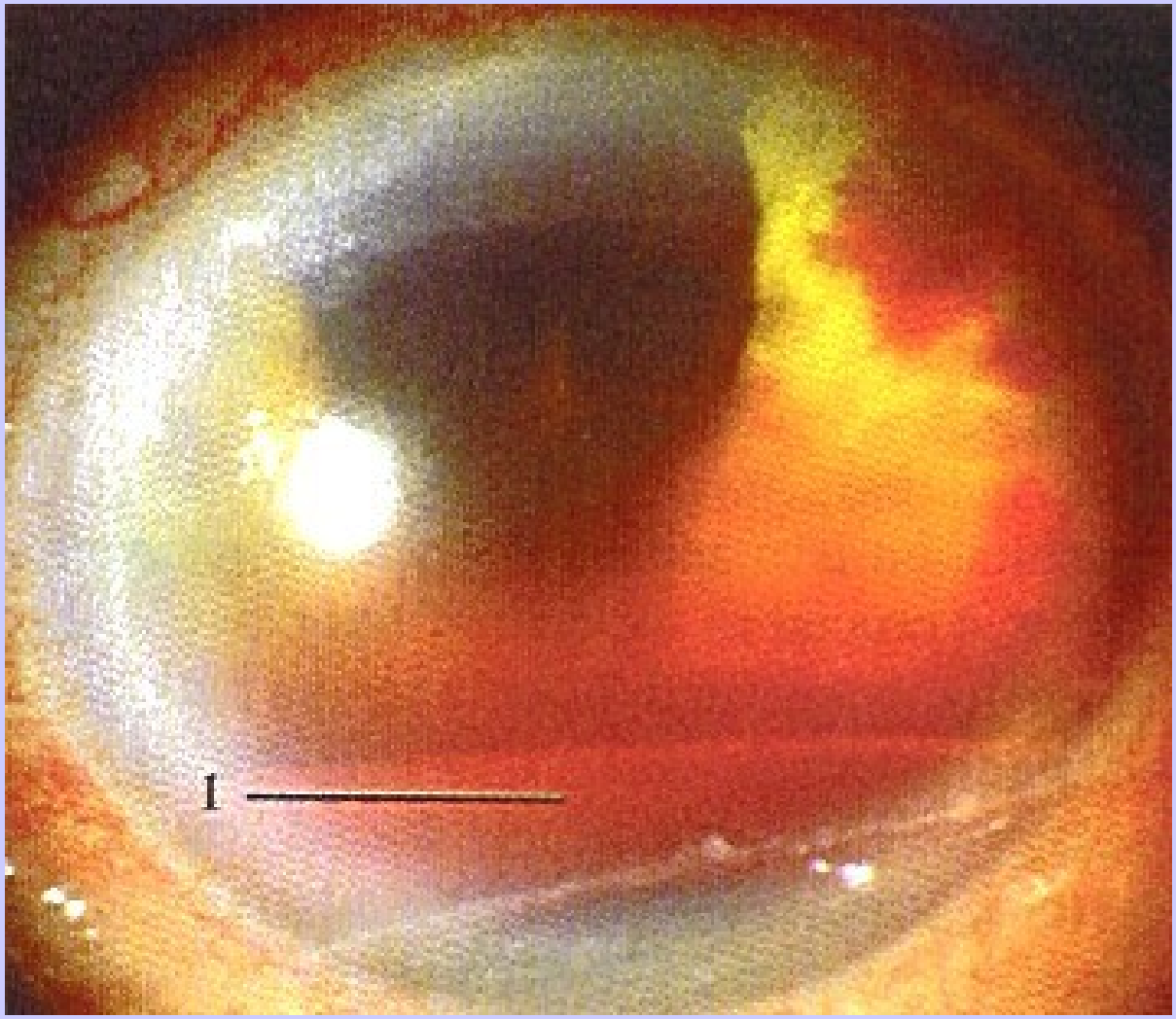
Case #9

- **Tx:**
  - ***IMMEDIATE REFERRAL***
  - **lower IOP**
    - **beta-blocker (Timolol 0.5%)**
    - **Carbonic anydrase inhibitor (Diamox PO)**
    - **Osmotic agents (isosorbide PO or IV mannitor)**

Case #10



Case #11



Case #11

- **Tx:**
  - ***refer immediately***
  - **shield affected eye immediately (no patch)**
  - **bed rest w/ head up**
  - **cycloplegic agents (atropine sulfate 1%) if clot < 24-48 hrs old**
  - **antiemetic, analgesic prn (no ASA or NSAIDs)**

Case #12